

CLAIMS:

1. A multi stack optical data storage medium (15) for recording and reading by means of a focused radiation beam (10) entering the medium (15) through a first entrance face (11), said medium having at least a first substrate (1) with on at least one side thereof:
 - a first layer stack (2), comprising a first information layer,
 - 5 - a second layer stack (4), comprising a second information layer, said second layer stack being present at a position closer to the first entrance face (11) than the first layer stack (2), separated from the first layer stack by a first transparent spacer layer (3),
 - the first and the second layer stack each having an effective radiation beam reflection R_{eff} between 0.04 and 0.08,
 - 10 characterized in that a third layer stack (6), comprising a third information layer, is present at a position closest to the first entrance face (11), separated from the second layer stack (4) by a second transparent spacer layer (5), and said third layer stack having a radiation beam transmission T_3 larger than 0.70, and the third information layer is of a type selected from the group of types consisting of a read only layer and a write once layer.
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2. A multi stack optical data storage medium as claimed in claim 1, wherein at least one of the first and the second information layer is a rewritable layer.
3. A multi stack optical data storage medium as claimed in any one of claims 1 or
20 2, wherein a reflective layer is present adjacent the third information layer comprising a dielectric material.
4. A multi stack optical data storage medium as claimed in any one of claims 1 -
3, wherein the third information layer is a read only layer and the third layer stack has a
25 radiation beam transmission T_3 between 0.86 and 0.91.
5. A multi stack optical data storage medium as claimed in any one of claims 1 -
3, wherein the third information layer is a write-once layer and the third layer stack has a

radiation beam transmission T_3 between 0.81 and 0.84.

6. A multi stack optical data storage medium as claimed in any one of claims 1 – 5, wherein a second radiation beam entrance face opposite to the first entrance face is present for recording and reading by means of a focused radiation beam, entering the medium through the second entrance face, in a fourth, fifth and sixth stack identical to the respectively the first, second and third stack.
7. Use of a multi stack optical data storage medium as claimed in any one of claims 1 – 6 in a device suitable for recording and reading a dual stack optical data storage medium by means of a focused radiation beam, in which medium the first and the second layer stack each have an effective radiation beam reflection R_{eff} between 0.04 and 0.08.